

LISTING AND AMENDMENT OF THE CLAIMS

1. (currently amended) A method for investigating a body fluid for cancer cells, where the expression of at least 2 genes which are selected from the group consisting of

- i) manganese superoxide dismutase genes;
- ii) thioredoxin reductase genes; and
- iii) glutathione peroxidase genes

is determined on at least one cell-containing fraction of the body fluid.

2. (currently amended) The method as claimed in claim 1, ~~characterized in that~~ wherein the expression of at least one manganese superoxide dismutase gene, of at least one thioredoxin reductase gene and of at least one glutathione peroxidase gene is determined.

3. (currently amended) The method as claimed in claim 1 ~~or 2, characterized in that~~ wherein the body fluid is selected from blood, bone marrow, lymph, sputum, lavages, puncture fluids, ascites, mucosal smears, exudates, urine and stool.

4. (currently amended) The method as claimed in ~~any of the preceding claims, characterized in that~~ Claim 1 wherein the cell-containing fraction is obtained from the body fluid with enrichment of cancer cells.

5. (currently amended) The method as claimed in ~~any of the preceding claims,~~
~~characterized in that~~ claim 1 wherein

- the cell-containing fraction is obtained from the body fluid with enrichment of cancer cells, and the expression of the genes in the cell-containing fraction is determined,
- a further cell-containing fraction of the body fluid or of a comparable biological sample is provided, and the expression of the genes in the further cell-containing fraction is determined, and
- the expression for each gene in the cell-containing fraction is compared with its expression in the further cell-containing fraction.

6. (currently amended) The method as claimed in claim 5, ~~characterized in that~~
wherein the comparable biological sample is derived from the individual whose body fluid is investigated for cancer cells.

7. (currently amended) The method as claimed in ~~either of claims 5 or 6,~~
~~characterized in that it is~~ claim 6 wherein it is determined whether expression of the genes in the cell-containing fraction is elevated by comparison with the expression of the genes in the further cell-containing fraction.

8. (cancelled)

9. (currently amended) An analysis kit comprising

- i) means for determining the expression of at least one manganese superoxide dismutase gene;
- ii) means for determining the expression of at least one thioredoxin reductase gene; and

- iii) means for determining the expression of at least one glutathione peroxidase gene,

and optionally further usual means for carrying out the method as claimed in ~~any of claims 1 to 7~~ claim 1.

10. (currently amended) An analysis kit as claimed in claim 9, comprising

- i) sequence-specific primers and/or probes for determining the expression of at least one manganese superoxide dismutase gene;
- ii) sequence-specific primers and/or probes for determining the expression of at least one thioredoxin reductase gene; and
- iii) sequence-specific primers and/or probes for determining the expression of at least one glutathione peroxidase gene[[,]]

~~and optionally further usual means for carrying out the method as claimed in any of claims 1 to 7.~~

11. (new) The method as claimed in claim 1, wherein the expression of at least one manganese superoxide dismutase gene and of at least one further gene selected from the group consisting of thioredoxin reductase genes and glutathione peroxidase genes is determined.

12. (new) The method as claimed in claim 1, which is for identifying disseminated cancer cells in the body fluid.

13. (new) The method as claimed in claim 12, wherein the elevated expression of at least one of said genes indicates the presence of disseminated cancer cells in the body fluid.

14. (new) The method as claimed in claim 1, which is for early diagnosis of a tumor.

15. (new) The method as claimed in claim 14, wherein the elevated expression of at least one of said genes indicates the presence of a tumor.

16. (new) The method as claimed in claim 1, which is for estimating the risk to develop a metastasis or a recurrence.

17. (new) The method as claimed in claim 16, wherein the elevated expression of at least one of said genes indicates a risk to develop a metastasis or a recurrence.